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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/213,984	12/17/1998	WILHELMUS J.M. DIEPSTRATEN	DIEPSTRATEN 19-5-5	6137

47396 7590 04/10/2008 HITT GAINES, PC LSI Corporation PO BOX 832570 RICHARDSON, TX 75083	**EXAMINER** DONAGHUE, LARRY D

ART UNIT	PAPER NUMBER
2154	

NOTIFICATION DATE	DELIVERY MODE
04/10/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket@hittgaines.com

	Application No.	Applicant(s)
Office Action Summary	09/213,984	DIEPSTRATEN ET AL.
	Examiner	Art Unit	
	Larry D. Donaghue	2154	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>6/25/2007</u>.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-22</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

1.   Claims 1-22 are presented for examination.

2.   Claims 1-4 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. (5,528,513) in view of Sharangpani et al. (6,272,520).

1.   Vaitzblit et al. taught the invention (claims 1, 4 and 8) as claimed including a an event recorder and event acknowledger (col. 4, lines 48-60); foreground controller (figure 1, 158) for activating the task according to priority (see abstract) and in response to events (col. 4, lines 43-60), and a background controller operating in a cyclical manner (col. 5, lines 15-17 and Figure 1, 100). Vaitzblit et al. does not expressly state the code is of the currently active context, Sharangpani et al. taught the determination as to whether to change context is done before the new context is started (col. 4, lines 39-col. 5, line 5, col. 7, lines 46-67) .IT would have been obvious to combine these teaching In view of the express teaching of and Sharangpani et al. (see col. 2,lines 58-67).

2.   As to claims 2 and 9, Vaitzblit et al. taught masking (col. 4, lines 43-60).

3.   As to claims 3 and 10, Vaitzblit et al. taught storing the events therefore the reference taught at least a Flip-Flop (col. 3, line 55- col. 4, line 67).

4.   Claims 5, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. (5,528,513) and Sharangpani et al. (6,272,520) as applied to claims 1, 8, and above, and further in view of Dummermuth et al. (6,009,454).

        It would have been obvious to one of ordinary to replace the time slice scheduling of Vaitzblit et al. with the instruction count as expressly suggested by Dummermuth et al. (Col. 3, lines 22-23).

5.   Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. (5,528,513) as applied to claims 1 and 8 above, and further in view of Seibert et al. (5,239,652).

        Vaitzblit et al. failed to disclose placing the processor in an idle state. Seibert et al. taught place a processor in idle state in response to inactivity. It would have been obvious to combine the teachings to allow for the reduction of power consumption.

6.   Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. and Sharangpani et al. as applied to a claims 1 and 8 above, and further in view of McLain et al. (6,256,659).

        As to claims , It would have been obvious to one of ordinary to include the teaching of vectoring as suggested by McLain, Jr. et al. (Col. 12, lines 63-67), to gain the benefit of allowing the process to resume at a later time when it was interrupted.

7.   Claims 15-18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al.

as applied to claims 1- 4 and 8-11   above, and further in view of Motomura (5,713,038) and Sharangpani et

al. (6,272,520) .

        Vaitzblit et al. taught the substantially invention (claims 15 and 18) as claimed including a an event

recorder and event acknowledger (col. 4, lines 48-60); a foreground controller (figure 1, 158) for activating

the task according to priority (see abstract) and in response to events (col. 4, lines 43-60), and a background

controller operating in a cyclical manner (col. 5, lines 15-17 and Figure 1, 100).

        Vaitzblit et al. did not teach a plurality of register sets and the interconnection of the plurality of

register sets with the execution core. Motomura taught the use of a plurality of register sets and the

interconnection of the plurality of register sets with the execution core. It would have been obvious to one of

ordinary skill in the data processing art to modify the teaching of Vaitzblit et al. with that of Motomura to

realize high speed and more flexible context switching, in an conventional processor.

         Vaitzblit et al. nor Motomura et al. state the code is of the currently active context, Sharangpani et

al. taught the determination as to whether to change context is done before the new context is started (col.

4, lines 39-col. 5, line 5, col. 7, lines 46-67)

8.   As to claim 22, It would have obvious to one of ordinary skill in the data processing art to included

the teaching of Vaitzblit et al. and Motomura, to gain the benefit of the hierarchical scheduling technique and

to realize high speed and more flexible context switching, in an general-purpose computer.

9.   As to claims 16, Vaitzblit et al. taught masking (col. 4, lines 43-60).

10.   As to claim 17, Vaitzblit et al. taught storing the events therefore the reference taught at least a

Flip-Flop (col. 3, line 55- col. 4, line 67).

11.   Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. (5,528,513)

in view of Motomura (5,713,038) and Sharangpani et al. (6,272,520) as applied to claim 15 above, and

further in view of Dummermuth et al. (6,009,454).

        It would have been obvious to one of ordinary to replace the time slice scheduling of Vaitzblit et al.

with the instruction count as expressly suggested by Dummermuth et al. (Col. 3, lines 22-23).

12.   Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. (5,528,513)

, Dummermuth et al. (6,009,454) ,Motomura (5,713,038) and Sharangpani et al. (6,272,520) as applied to

claim 15 above, and further in view of Seibert et al. (5,239,652).

        The combined teachings failed to disclose placing the processor in an idle state. Seibert et al.

taught place a processor in idle state in response to inactivity. It would have been obvious to combine the

teachings to allow for the reduction of power consumption.

13.   Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. ,Motomura

and Sharangpani et al. (6,272,520) as applied to a claim 15 above, and further in view of McLain et al.

(6,256,659).

14.   As to claim 21, It would have been obvious to one of ordinary to include the teaching of vectoring

as suggested by McLain, Jr. et al. (Col. 12, lines 63-67), to gain the benefit of allowing the process to

resume at a later time where it was interrupted.

        Any inquiry concerning this communication or earlier communications from the examiner should be

directed to Larry D. Donaghue whose telephone number is 571-272-3962. The examiner can normally be

reached on M-F 8:00-5:00.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at

866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or

access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Larry D Donaghue/
Primary Examiner, Art Unit 2154